

**Notice of Allowability****Application No.**

09/884,527

**Applicant(s)**

KEEGAN, KEVIN R.

**Examiner**

Jonathan S. Crepeau

**Art Unit**

1746

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/13/03.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ The drawings filed on 18 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.  
(b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.  
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- 1 ☒ Notice of References Cited (PTO-892)  
2 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3 ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No. \_\_\_\_\_  
4 ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- 5 ☐ Notice of Informal Patent Application (PTO-152)  
6 ☐ Interview Summary (PTO-413), Paper No. \_\_\_\_\_  
7 ☐ Examiner's Amendment/Comment  
8 ☒ Examiner's Statement of Reasons for Allowance  
9 ☐ Other

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-25 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Independent claims 1 and 14 recite a solid oxide fuel cell stack comprising, among other features, an interconnect which comprises an electrical supply connector, the interconnect being configured to receive electrical energy to act as a heating element. Independent claim 17 is directed to a method of heating using this apparatus. The prior art of record does not teach or fairly suggest the subject matter recited in these claims. JP 8-268750 is directed to a ceramic material which may be used as an interconnector of a solid oxide fuel cell or as a ceramic heater element. These uses are shown as being two different embodiments in Figures 1 and 2 and paragraphs 22 and 23. As such, the reference does not fairly suggest combining the functions of the embodiments; i.e., connecting an electrical supply connector to the interconnect in order to use it to heat the solid oxide fuel cell. Additionally, Jones (U.S. Patent 6,649,293) teaches a fuel cell stack comprising a heatable end plate (180) which comprises resistive heating elements (181) (see Fig. 6). However, the Jones reference is deficient because the "end plate" of the reference does not function as the claimed "interconnect" since it does not interconnect two fuel cells. Further, the reference is directed to solid polymer electrolyte fuel cells having a reactant water condensation problem (see col. 2, line 13). This disclosure does not fairly suggest a solid oxide fuel cell, which does not have such a reactant water condensation problem.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

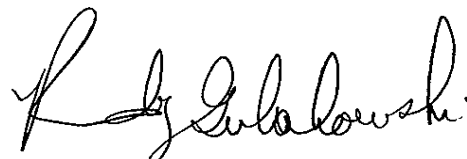
*Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (703) 305-0051 (prior to December 17, 2003) or (571) 272-1299 (after December 17, 2003). The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached at (703) 308-4333. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900. Additionally, documents may be faxed to (703) 872-9310 (for non-final communications) or (703) 872-9311 (for after-final communications).

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jonathan Crepeau  
Patent Examiner  
Art Unit 1746  
November 29, 2003

  
RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700